inel news
idaho national engineering laboratory
April 6, 1982

TMI cask of resin liners to be examined at INEL

A cask containing resins used to strip radioactive materials from water in the damaged Three Mile Island plant will arrive early in April at INEL as part of the laboratory's long-time reactor safety research and development program.

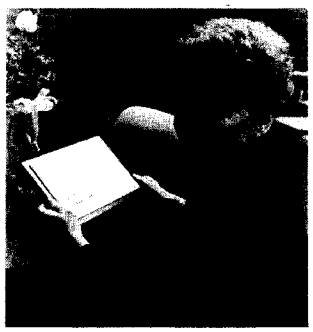
Together with other private and government laboratories across the nation, the INEL is conducting research and development work on the TMI plant in Pennsylvania to provide additional information on reactor accident consequences and removal of radioactive materials from the damaged reactor.

One of these activities involves testing the stability in a radiation environment of an organic resin bed similar to those used to remove minerals in home water softeners. At TMI such resins were used to remove radioactive material from water that was pumped from the reactor building to the auxiliary and fuel handling building during the March 1979 accident.

The Battelle Columbus Laboratory at Columbus, Ohio, has been doing research on a radioactive resin-filled liner from TMI for nearly a year. Battelle's work is now complete, and the resin liner will be shipped to the INEL where more extensive research, including examination of the container itself, will be conducted. Additional liners for further research will be received later in the year. As many as fifty liners in all may be examined at INEL.

The resin liners will be transported by truck in shipping casks approved by the Nuclear Regulatory Commission and the Department of Transportation.

The research will be done for DOE by EG&G Idaho at INEL's Test Area North.



DOE MOHAMED, MANAGER of Women's Programs, EG&G Idaho, has been presented the "Women Helping Women" award by the Idaho Falls Chapter of Soroptimist International. She was entered as a nominee for the award by EG&G Idaho, The Professional Secretaries Association, and by a letter to the Soroptimists bearing 150 signatures of both men and women indicating their support for her. Mohamed's name has now been submitted to the Rocky Mountain Region as a nominee for the regional competition.

DOE presents EG&G Idaho fusion energy awards

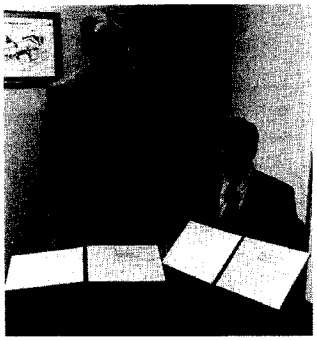
by John Walsh, EG&G Idaho

"I think it did a lot for EG&G's image. Our selection by the Department of Energy says DOE not only recognizes our technical ability to do work, but also our ability to direct work."

With this thought, Peter Hsu pats EG&G Idaho on the back while accepting a DOE certificate of achievement for contributions to a national fusion project.

Hsu, in EG&G Idaho's Fusion Technology program, received his certificate for efforts in instrumentation and controls, and Jimmy Crocker, manager of EG&G Idaho's Fusion Safety program, received a certificate for work in the safety aspects in developing initial plans for a Fusion Engineering Device (FED).

While both men are proud of the singular honor given them by DOE's Office of Energy Research, both also consider their awards recognition of team efforts and an important plateau for EG&G Idaho.



JIMMY CROCKER (LEFT), EG&G Idaho Fusion Safety program, and Peter Hsu, EG&G Idaho Fusion Technology program, are recipients of certificates for their work in a national fusion project.

Crocker says that EG&G Idaho already is the national lead lab for fusion safety research, so the company was a natural for being selected to direct the safety work for the FED. But the real coup, he says, was being chosen to direct the instrumentation and controls work.

"We wanted to get noticed in instrumentation and controls," states Crocker. "When DOE was looking for someone to direct this part of the project, we realized the field was open. We proposed Hsu to head the work at EG&G and DOE accepted it."

The FED is this nation's initial step toward proving fusion energy is a viable energy resource. The FED is a planned $2 billion fusion reactor facility which will produce 200 megawatts of fusion power. The primary mission is to develop and test the engineering aspects of fusion. The test facility will show a fusion reactor's ability to have sustained production of fusion power and to maintain a self-sufficient fuel cycle. It will demonstrate the safety features of fusion energy and the necessary remote maintenance concepts. The device will have the major systems of a fusion reactor—superconducting magnets and the plasma—operating together. The target date for operation of the FED is the early to mid 1990s

The FED development program is a national effort involving more than 300 persons from 27 industrial firms, seven universities and 10 laboratories.

Crocker's fusion safety group was made up entirely of EG&G Idaho researchers: Sidney Cohen, Doug Holland and Steve Herring.

Hsu's group was composed of EG&G Idaho researchers Bill Roach and Glen Longhurst, but also included researchers from Argonne National Laboratory, Oak Ridge National Laboratory, General Electric, McDonnell Douglas, General Atomic and Charles Stark Draper Laboratory.

The multi-volume FED report, completed in just six months, is the first step in the journey to producing fusion energy, says Crocker. Much like a blueprint, the plan "develops the whole fusion technical area, identifying critical issues. Now we begin the work of answering questions and solving some of the problems. From here we are ready to make the first real hard designs for the FED. Title I design will start in fiscal year 1984 or 1985."

Likely, EG&G Idaho will retain its directing role in the safety aspects. But Hsu says there is no guarantee the company will head up future instrumentation and controls work.

security sense

Government theft — it's illegal, and it costs

The theft of three gallons of gasoline caused an INEL employee to lose his job.

A stiff penalty for a minor theft? The fact remains that theft is theft, no matter how small the item or who is involved. Theft of government property is an illegal act which necessitates some type of action. In this particular case, the action was severe.

The INEL, with its vast amounts of government property, is a prime target for theft. Each year numerous items of government property are reported missing or stolen. Government property is intended for the use of employees engaged in government work. This property is not meant for personal use or benefit; using it for such is misappropriation and may cause loss of job, loss of security clearance, detriment to reputation, or possible criminal proceedings.

Is the theft of three gallons of gasoline, or any theft, worth these risks?